

**REMARKS/ARGUMENTS**

In response to the Office Action dated September 12, 2006, claims 1 and 16 are amended and claims 3 and 7 are cancelled.

**REJECTION OF CLAIMS UNDER 35 USC §102 AND 35 USC §103**

Claims 1, 2, 4, 8-13, 16 and 17 are rejected under 35 USC §102(b) as being anticipated by Wildenrath (GB 1326665).

Claims 5-6 are rejected under 35 USC §103(a) as being unpatentable over Wildenrath in view of Numata (US 2002/0015145).

Claim 14 is rejected under 35 USC §103(a) as being unpatentable over Wildenrath in view of Takarida EP 0-668-576.

Claim 15 is rejected under 35 USC §103(a) as being unpatentable over Wildenrath in view of Takarida EP 0-668-576 and further in view of Liu et al. (US Patent 6,407,810).

**NOVELTY AND PATENTABILITY**

Applicants respectfully traverse the prior art rejections. It is submitted that, in view of the amendments to the independent claims, all of the pending claims are novel and patentable over the various documents and combinations thereof cited in the art rejections.

Independent claims 1 and 16 recite measuring “the intensity of the transmitted light of ultraviolet radiation at multiple different positions on the paper.”

Anticipation under 35 U.S.C. § 102(b) requires that “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”

*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed Cir. 1987).

At a minimum, the cited prior art does not disclose (expressly or inherently) the above recited limitation. The Office Action asserts, at page 2, that Wildenrath discloses “a light measurement module (12) that measures intensity of transmitted light of ultraviolet radiation which is transmitted through the paper.”

Wildenrath, at FIG. 3, merely discloses a module 12 comprising elements 13 and 14. Module 12 is described at page 4, lines 22-27: “[b]elow the bank-note B and in the path of the excitation radiation AS there is arranged a third photo-receiver 12 comprising a filter 13 and a photo-sensitive structural element 14. The filter 13 is selected to pass only the spectrum AS necessary for excitation.” Wildenrath directs the reader to “provide for testing to establish the presence of such fluorescent material incorporated in the paper and to distinguish the fluorescent material from fluorescent material subsequently applied to the piece of paper” at page 1, first column, lines 40-45. More specifically, Wildenrath distinguishes “between an imprinted fluorescent layer and fluorescent material distributed in the volume of the paper” at page 1, lines 60-63.

Wildenrath, at page 4 line 115 to page 5 line 1, states “[a]lthough the transparency of the banknote paper is poor for the spectral range of the exciting radiation AS, the signal appearing at the output of the photo-element 14, after amplification by the preamplifier 20, is still required to have a minimum level U adjusted in the discriminator 29. Thus, it is possible to recognise [sic] a type of paper having a wrong density. On the other hand, in the case of a crack or an inaccurate seam the exciting radiation passes through the filter 13 into photoelement 14 with small reduction in intensity. The corresponding signal will thus be above the upper threshold O of the

discriminator 29.” Thus, Wildenrath merely discloses a single photo-receiver 12 located in a position to measure excitation radiation AS transmitted through the paper, and adequate to recognize a type of paper having wrong density or a crack. However, Wildenrath does not teach or suggest measuring “the intensity of the transmitted light of ultraviolet radiation at multiple different positions on the paper” as required by independent claims 1 and 16.

Hence Wildernath does not anticipate claim 1 or claim 16 or any of the claims that depend therefrom, and the anticipation rejection should be withdrawn.

Similarly, none of the other cited prior art (Numata, Takarida, and Liu) teaches or suggests measuring “the intensity of the transmitted light of ultraviolet radiation at multiple different positions on the paper” as required by independent claims 1 and 16.

Numata (US 2002/0015145) merely states “forming said light projecting section with an infrared light LED, a red light LED, and a blue light LED” at paragraph [0009], and does not teach or suggest measuring “the intensity of the transmitted light of ultraviolet radiation at multiple different positions on the paper” as required by independent claims 1 and 16.

Takarida (EP 0-668-576) merely states “detecting visible light emitted from phosphor materials contained in bills upon being irradiated with ultraviolet rays” in the Abstract, and does not teach or suggest measuring “the intensity of the transmitted light of ultraviolet radiation at multiple different positions on the paper” as required by independent claims 1 and 16.

Liu et al. (US Patent 6,407,810) merely states “[t]he light reflected from these portions of the device package 210 maintains the same wavelength as the source light, here, ultraviolet” at column 2, lines 41-44, and does not teach or suggest measuring “the intensity of the transmitted

light of ultraviolet radiation at multiple different positions on the paper” as required by independent claims 1 and 16.

Hence, no combination of the cited documents would provide the intensity measurements at multiple different positions.

Thus, independent claims 1 and 16 would not have been obvious in view of the cited prior art.

Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as independent claims 1 and 16 is patentable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon (claims 2, 4-6, 8-15, and 17) are also patentable. In addition, it is respectfully submitted that the dependent claims are patentable based on their own merits by adding novel and non-obvious features to the combination.

For example, none of the cited prior art teaches or suggests the claim 12 elements “a visible radiation block filter” and “an ultraviolet block filter” arranged in a single apparatus.

Thus, claims 2, 4-6, 8-15, and 17 are not anticipated by the cited prior art, and are not obvious in view of the cited prior art.

## **CONCLUSION**

Accordingly, it is urged that the application, as now amended, is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues

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that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call Applicants' attorney at the telephone number shown below.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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